

REMARKS

Favorable reconsideration of this application, as presently amended, is respectfully requested.

With respect to the drawings, Fig. 1 has been amended to include the legend "Prior Art" as required in the Office Action. Enclosed is a copy of amended Fig. 1 showing the change in red. Upon approval from the Examiner, this change will be incorporated into the formal drawings.

Claims 1-53 are pending in the present application. Claim 54 has been canceled by the present amendment. Claims 43-46 were rejected under 35 USC 112, second paragraph, as being indefinite. Claim 33-37, 40 and 42-54 were rejected under 35 USC 102(a) as being anticipated by Enomoto et al. Claims 29-32 and 41 were rejected under 35 USC 103(a) as being unpatentable over Enomoto et al. in view of Kristy. Claim 38 was rejected under 35 USC 103(a) as being unpatentable over Enomoto et al. in view of Kristy. Claims 1-6, 8-19, 21-28 and 39 were rejected under 35 USC 103(a) as being unpatentable over Enomoto et al. in view of Kristy. Claims 7 and 20 were rejected under 35 USC 103(a) as being unpatentable over Enomoto et al. in view of Kristy.

With reference to the rejection of claims 43-46 under 35 USC 112, second paragraph, the noted claims have been amended with an eye toward correcting the informalities noted on page 6 of the Office Action.

Accordingly, claims 43-46 are in compliance with the requirements of 35 USC 112, second paragraph.

With reference to the rejection of claims 33-37, 40 and 42-54 under 35 USC 102(a) as being anticipated by Enomoto et al., Applicants note that the present invention enables the batching of digital images from multiple customer orders. More specifically, as described in, for example, pages 10 and 11 of the specification, images from different orders which have similar characteristics with respect to, for example, print size or output request, are batched together regardless of what order the images originated from. Therefore, in the present invention, the batches are not created on an order by order bases but instead, can depend on the output requirements for the image.

Claims 33 requires that the images be received from multiple customer orders, and that each image and its associated identification data be sent to a processing unit. As further required by claim 33, the processing unit creates batches of digital images from the multiple customer orders, with the images in each batch having similar identification data, such that a batch of images may include images from different customer orders. Claim 33 also requires that the processing unit further determine an output sequence of each of the images to output devices based on at least the associated identification data.

The reference to Enomoto et al. relates to a home computer system, in which images from a single order are grouped together for processing. There is no showing or suggestion in the reference to Enomoto et al. that images from multiple orders with similar identification data are to be batched together. More specifically, the references to Enomoto et al. does not show or suggest the concept of taking images from different orders which have similar identification data and creating a batch which includes these images as required by claim 33.

Claims 34-37 depend either directly or indirectly from claim 33 and set forth additional unique features of the present invention which are also not believed to be shown or suggested in the reference to Enomoto et al.

Claim 40 relates to a photofinishing method which includes the steps of receiving images from multiple customer orders, and creating a virtual batch of the received images based on at least a time necessary to complete output image products. The virtual batch as required by claim 40 comprises images from different customer orders. For the reasons noted above, the reference to Enomoto et al. which relates to a single order, is not believed to show or suggest the placing of images from multiple orders into a batch.

Claim 42 relates to a method of managing work flow based on the invention as set forth in Fig. 5 and described in the paragraph bridging pages 16 and 17 of the present specification. More specifically, in the invention as set forth in claim 42, codes from order envelopes are read and an output service/product associated with a received image is produced. As further required by claim 42, order envelopes are placed in a sequence at a location designated for the output service/product, and the produced output service/product is delivered to the appropriate order envelope at the location in a sequence which matches a sequence of the order envelopes.

The specific photofinishing method described in claim 42 is not believed to be shown or suggested in the reference to Enomoto et al.

Claims 43-46 depend from claim 42 and set forth additional unique features of the invention which are also not believed to be shown or suggested in Enomoto et al.

Claims 47 and 48 relate to a photofinishing system which includes creating a virtual batch of images from different customer orders. As described above, the reference to Enomoto et al. is not believed to show or suggest the features of claims 47 and 48.

Claims 49-52 depend from claim 48 and set forth additional unique features of the present invention which are also not believed to be shown or suggested in the applied reference.

Claim 53, like claims 47 and 48, requires that the created virtual batch comprise images from different customer orders. For the reasons noted above, the reference to Enomoto et al. is not believed to show or suggest the features of claim 53.

Accordingly, the reference to Enomoto et al. is not believed to anticipate or make obvious the features required by claim 33-37, 40 and 42-54.

Referring to the rejection of claim 29-32 and 41 under 35 USC 103(a) as being unpatentable over Enomoto et al. in view of Kristy; the rejection of claim 38 under 35 USC 103 as being unpatentable over Enomoto et al. in view of Kristy; the rejection of claims 1-6, 8-19, 21-28 and 39 under 35 USC 103(a) as being unpatentable over Enomoto et al. in view of Kristy; and the rejection of claims 7 and 20 under 35 USC 103(a) as being unpatentable over Enomoto et al. in view of Kristy, the references to Enomoto et al. and Kristy, whether considered individually or in combination, are not believed to show or suggest the features of the claimed invention.

As noted in the Office Action, the reference to Enomoto et al. does not show the plurality of image obtaining devices. The reference to Kristy was cited to show a plurality of image obtaining devices, however, the reference to Kristy is not believed to correct the deficiencies of Enomoto et al. with respect to the claimed invention. The reference to Kristy shows a digital imaging system which includes a host computer that is coupled with one or more interactive videos display terminals.

Claim 1 requires that images be received from multiple customer orders, and that a batch of digital images be created from the multiple customer orders. Claim 1 further requires that the images in each batch have similar identification data, such that a batch of images may include images from different customer orders. As described above, the reference to Enomoto et al. which relates to processing a single order does not show or suggest creating a batch of images in which the images are obtained from different customer orders. The reference to Kristy does not correct the deficiencies of Enomoto et al. with respect to the claimed invention, in that like Enomoto et al., the reference to Kristy does not show or suggest the specific combination of steps required by claim 1, including the features of creating a batch of images from different customer orders.

Therefore, even if combinable, the combination of Enomoto et al. and Kristy would not show or suggest the features of the claimed invention. Further, absent Applicants' disclosure, one having ordinary skill in the art would not have combined the above-noted references to achieve the claimed invention,

since neither reference shows or suggests the concept of creating a batch of digital images in the manner required by claim 1.

Claims 2-14 depend from claim 1 and set forth additional unique features of the present invention which are also not believed to be shown or suggested in the applied references.

Claim 15 like claim 1 relates to the concept of creating a batch of images from multiple customer orders, in which the images in each batch have similar identification data. For the reasons, noted above with respect to claim 1, the applied references are not believed to show the features of claim 15.

Claims 16-28 depend from claim 15 and set forth further unique features of the invention which are also not shown or suggested in the applied references.

Claims 29 and 33, like claim 1, relate to the batching feature of the present invention as discussed above with respect to claim 1.

Claims 30-32 which depend from claim 29, and claims 30-37 which depend from claim 33, set forth additional unique features of the invention which are also not believed to be shown or suggested in the applied references.

Claims 38-41 also set forth features of the virtual batch creation in which images from different customer orders are batched. Based on the arguments noted above with respect to claim 1, the applied references are further not believed to show or suggest the features of claims 38-41.

Claim 42 relates to the concept of reading codes on order envelopes and delivering output service/products to a location which includes the order envelopes placed in a specific sequence. Both the references to Enomoto et al. and Kristy, whether considered individually or in combination, do not show or suggest the features of claim 42.

Claims 43-46 depend from claim 42 and set forth further unique features of the invention which are also not believed to be shown or suggested in the applied references.

Claims 47-52 set forth features of the photofinishing method of the present invention, which like claim 1, requires that the virtual batch includes images from different customer orders. For the reasons noted above, claims 47-52 are also believed to be allowable.

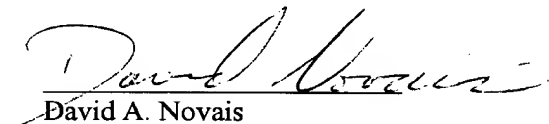
Claim 53, like claim 1, also requires that the virtual batch comprises images from different customer orders. Claim 53 further sets forth that the images that are associated with the original order are in a first sequence, and that the method comprises the step of resequencing the original orders from a first sequence to a second sequence. This method is not believed to be shown or suggested in the applied references.

Accordingly, the references to Enomoto et al. and Kristy, whether considered individually or in combination, are not believed to anticipate or make obvious the specific features required by claims 1-53.

In view of the foregoing comments, it is submitted that the inventions defined by each of claims 1-53 are patentable, and a favorable reconsideration of this application is therefore requested.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page(s) is captioned "**Version With Markings To Show Changes Made.**"

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Version With Markings To Show Changes Made

Claims 1, 4, 5, 15, 17, 18, 29, 33, 35, 36, 38, 40, 42-48 and 53 have been amended as follows:

1. (Amended) A method of producing digital image products in a photofinishing lab, the photofinishing lab having a plurality of image obtaining devices for obtaining a plurality of digital images from multiple customer orders, a plurality of digital output devices for providing a plurality of digital image products based on the obtained digital images[, and a central processing unit, wherein each one of the obtained digital images is related to an original order,] the method comprising the steps of:

associating each obtained digital image with identification data;

sending each of said obtained digital images and their associated identification data to the central processing unit, the central processing unit analyzing each of the obtained digital images and comparing said analyzed obtained digital images with reference digital image data representative of an optimum image, said central processing unit further creating batches of digital images from the multiple customer orders, the images in each batch having similar identification data, such that a batch of images may include images from different customer orders, said central processing unit further determining an output sequence of each of said obtained digital images to said output devices based on at least the associated identification data;

providing a digital image product based on the obtained digital image at said digital output device; and

combining the digital image product from the output devices with a related original order from said original orders using the associated identification data.

4. (Amended) A method according to claim 1, wherein said identification data is at least source data indicative of a source of said obtained digital image.

5. (Amended) A method according to claim 1, wherein said identification data is at least a unique consumer/retailer identifier.

15. (Amended) A photofinishing lab for producing digital image products, the photofinishing lab comprising:

a plurality of image obtaining devices for obtaining digital images, each of said digital images being related to [original] multiple customer orders;

a plurality of image output devices for providing digital image products based on said obtained digital images, each of the obtained digital images being associated with identification data;

a central processing unit which receives said obtained digital images and the associated identification data, said central processing unit being adapted to analyze the obtained digital images and compare each of said obtained digital images with reference image data representative of an optimum image, said central processing unit being further adapted to create batches of digital images from the multiple customer orders, the digital images in each batch having similar identification data such that a batch of digital images may include digital images from different customer orders, said central processing unit being further adapted to determine an output sequence for each of said obtained digital images to said image output devices based on at least the associated identification data;
and

a finishing arrangement which is adapted to combine the digital image products from said image output devices with a related original order from said original orders using the associated identification data.

17. (Amended) A photofinishing lab according to claim 15, wherein said identification data is at least source data indicative of a source of said obtained digital image.

18. (Amended) A photofinishing lab according to claim 15, wherein said identification data is at least a unique consumer/retailer identifier.

29. (Amended) A photofinishing method for managing workflow in a photofinishing lab, the method comprising the steps of:
receiving images at the photofinishing lab, each of said images being related to [original] multiple customer orders;
associating each image with identification data;
sending each image and its associated identification data to a processing unit, the processing unit analyzing said image with reference to image data representative of an optimum image and creating batches of digital images from said multiple customer orders, the images in each batch having similar identification data, such that a batch of images may include images from different customer orders, said processing unit further determining an output sequence of each of said images to output devices based on at least the associated identification data;
providing an image product based on the image at an output device of said output devices which is appropriate for the image product; and
combining the image product from the output device with a related original order from said original orders using the associated identification data.

33. (Amended) A computer program product comprising:
a computer readable storage medium having a computer program thereon which when loaded into a computer causes the computer to manage workflow in a photofinishing lab by performing the following steps:
associating images received at the photofinishing lab with identification data, each of the images being related to [original] multiple customer orders;
sending each image and its associated identification data to a processing unit, the processing unit creating batches of digital images from said multiple customer orders, the images in each batch having similar identification data, such that a batch of images may include images from different customer orders, said processing unit further [and] determining an output sequence of each of said images to output devices based on at least the associated identification data;

providing an image product based on the image at an output device of said output devices which is appropriate for the image product; and

combining the image product from the output device with a related original order from said original orders using the associated identification data.

35. (Amended) A computer program product according to claim 33, wherein said identification data is at least source data indicative of a source of said image.

36. (Amended) A computer program product according to claim 33, wherein said identification data is at least a unique consumer/retailer identifier.

38. (Amended) A digital photofinishing arrangement comprising:
a plurality of output devices, each of said output devices being adapted to produce a different output image product;

a plurality of image obtaining devices for obtaining images from multiple customer orders, at least one of said image obtaining devices being adapted to convert non-digital images of the obtained images into a digital format so as to place all of the obtained images in a common digital format; and

a processing unit which is adapted to create a virtual batch of said obtained images for forwarding to said plurality of output devices, said virtual batch including images from different customer orders and being created based on at least a time necessary to complete the image products, so as to compile a sequence of completion of said output image products that permits efficient use of said output devices.

40. (Amended) A photofinishing method comprising the steps of:
receiving images from multiple customer orders at a photofinishing lab;

converting non-digital images of said received images into a digital format, such that all of the images received at said photofinishing lab are in a common digital format; and

creating a virtual batch of said received images based on at least a time necessary to complete output image products at any of a plurality of output devices, said virtual batch comprising images from different customer orders, each of said output image products being related to an associated received image from said received images, such that a sequence of completion of the output image products that permits efficient use of the output devices is compiled.

42. (Amended) A method of managing workflow in a photofinishing lab comprising the steps of:

receiving images from multiple customer orders at the photofinishing lab;

[determining] reading codes on order envelopes associated with said received images to determine an output service/product which will be produced in association with said received images; [and]

placing the order envelopes in sequence at a location designated for the output service/product;

producing [creating a virtual batch of said received images based on at least] the output service/product associated with the received image based on the sequence of the order envelopes at the location designated for the output service product [, said virtual batch being indicative of an order sequence for completing the output service/product for the received images.]; and

delivering the produced output service/product to the appropriate order envelope at said location in a sequence which matches the sequence of the order envelopes.

43. (Amended) A method according to claims 42, wherein said [identification data is] codes comprise service/product data indicative of a type of image product for the image, such that images are modified in accordance with the service/product data and an output device to which the image is to be sent.

44. (Amended) A method according to claim 42, wherein said [identification data is] codes comprise source data indicative of a source of said image.

45. (Amended) A method according to claim 42, wherein said [identification data is] codes comprise a unique consumer/retailer identifier.

46. (Amended) A method according to claim 42, wherein said [identification data is] codes comprise at least one of a product/service data, a source data and a unique consumer/retailer identifier.

47. (Amended) A computer program product comprising:
a computer readable storage medium having a computer program thereon which when loaded into a computer causes the computer to manage a photofinishing workflow by performing the following steps:

determining an output service/product which will be produced in association with captured images from multiple customer orders; and

creating a virtual batch of the images based on at least the output service/product associated with the image, said virtual batch including images from different customer orders and being indicative of an order sequence for completing the output service/product for the image.

48. (Amended) A photofinishing method comprising the steps of:
receiving images from multiple customer orders at a photofinishing lab;

associating the images with identification data; and

creating a virtual batch of said images based on at least the identification data so as to provide for a sequence of completion of output image products associated with the images, said virtual batch including images from different customer orders.

53. (Amended) A photofinishing method comprising the steps of:

receiving images from multiple customer orders at a photofinishing lab in a first sequence;

converting non-digital images of said received images into a digital format, such that all of the images received at the photofinishing lab are in a common digital format; and

creating a virtual batch of the received images based on at least a common output product/service in a second sequence different than the first sequence, said virtual batch comprising images from different customer orders, wherein each of the received images are associated with original customer orders which are in said first sequence, and said method comprises the further step of re-sequencing the original customer orders from said first sequence to said second sequence.